

## Where Safety Is Accelerating

August 1999  
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### Elevator Safety Test

*"Ashington, England- Safety engineers checking the emergency braking system on a 480 foot mine-shaft-elevator said they had no idea two miners were trapped inside during the bouncing tests.*

*"I never want to get back into a pit cage as long as I live", said Mark Hetherington, who was bounced up and down inside the elevator for two hours.*

*"The elevator was raised to the surface and then sent into a free fall four times to test the braking system before safety engineers realized the two men were inside."*

APT Project at LANL  
Los Alamos, NM

# August Safety Newsletter

### August Safety Topic:

#### Fall Protection

Do you think that "Fall Protection" only applies to rock climbing and repelling? Think again, each year, falls consistently account for the greatest number of fatalities in the construction industry, and are a major concern in most other industries as well.

More than 300,000 American workers are disabled each year by work related falls. Even worse, approximately 14,000 people die each year as a result of a



fall. This is not just a work place hazard, almost 40% of these fatalities occur at home.

Events surrounding these accidents often involve a number of factors, including unstable working surfaces, misuse of fall protection equipment, and human error. Studies have shown that the use of guardrails, fall arrest systems, safety nets, covers, and travel restriction systems can prevent many deaths and injuries from falls. So to protect workers, LANL has mandated the installation and use of fall protection equipment when exposed to hazards of falling more than six feet.

*See Fall Protection, page 2*

### LIR Implementation!

*If You Work in LANL Facilities, You Need To Know!!!!*

APT-TPO is in the process of ensuring that the Project is in full compliance with all applicable Laboratory Implementation Requirements (LIR's). Every member of the APT team who works in a LANL facility must be familiar with these documents. Following is a short summary of how LIR's fit into LANL's overall plan for keeping each and everyone of us safe as we conduct our activities here at the Lab.

Part of the implementation of Integrated Safety Management (ISM) is the Laboratory's initiative to simplify and improve institutional requirements. This initiative, known as the Laboratory Standards and Requirements Project (LSRP), is aimed at accomplishing work in a safe, efficient, and cost-effective manner through a consistent and manageable set of requirements. In conjunction with the DOE, Laboratory technical divisions and program offices, and support divisions such as the Environment, Safety, and Health (ESH) Division and the Facilities Engineering (FE) Division, the LSRP Office is taking stock of the various documents in use at the Laboratory. These include:

- Program Requirements Documents (PRDs)
- Program Elements Documents (PEDs)
- Laboratory Standards (LSs), and
- Laboratory Procedures (LPs)

Representatives from support and technical organizations, together with Offices of Institutional Coordination (OICs), are examining the various documents for redundancies,

conflicts, and gaps. The following three types of institutional documents are emerging:

- Laboratory performance requirements (LPRs), which set forth mandatory expectations for performing work at the Laboratory;
- Laboratory implementation requirements (LIRs), which provide more prescriptive expectations for implementing performance requirements; and
- Laboratory implementation guidances (LIGs), which provide non-mandatory guidance for implementing requirements.

At the facility and activity levels, facility safety plans (FSPs) and hazard-control plans (HCPs) will set forth requirements for expected performance.

*See LIR Implementation, page 3*



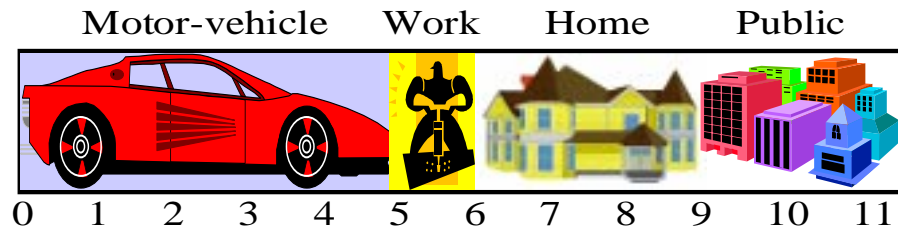
## Accident Facts <sup>(R)</sup>

### While you read!

While you are reading this newsletter, 4 persons in the US will be killed and about 740 will suffer a disabling injury.

On the average, there are 11 unintentional-injury deaths and about 2,200 disabling injuries every hour during the year.

### Deaths Every Hour



Source: National Safety Council

### Fall Protection

From page 1

**Requirements: 29 CFR 1926 Subpart M - Fall Protection --Training: ES&H Training - Ladder Safety (course # 12985)**

But this does nothing to protect us off-the-job! Amazingly, about 42% of falling deaths result from stairs and steps. Making sure that all steps are evenly spaced, installing a second handrail on wide stairs, having light switches at the top and bottom of stairways, and ensuring that carpeting is tightly woven and doesn't move or slide can go a long way to minimize this hazard. In addition, children under 10 account for half of hospital visits related to falls. You should always supervise babies on beds and changing tables, and strap them into high chairs and strollers. Make porches, balconies and fire escapes off limits. Use safety gates. And clear windows of climbing aids like chairs and beds.

In addition, whether at work or home follow these basic measures to lessen the chances of an unwanted trip to the ground!

#### Six ways to Prevent a Fall

1. Clean up! Remove clutter and boxes, especially from stairs and high traffic areas.  
Clean up spills immediately!
2. Re-route obstructing electrical cords.
3. Fill holes and depressions around your property.
4. Read the instructions for proper use of ladders, step stools and other household equipment.
5. Replace old light bulbs. Always use the appropriate wattage listed.
6. Always use handrails.

### On the Home Front...

#### Think Safety - At the Swimming Pool and Beach

According to the U.S. Lifesaving Association, drowning is the third leading cause of unintentional death in the United States, and the second leading cause of death for people ages 5 to 44. For children ages 1 to 2, drowning is the leading cause of injury death.

Most safety organizations, including the National Spa and Pool Institute and the Drowning Prevention Foundation, agree:

***The primary element in preventing pool and beach incidents of any kind is constant supervision.***

However, even with supervision, problems can still occur. For boys between the ages of 1 and 3 who have drowned, most of the victims were being supervised by one or both parents, according to the U.S. Consumer Product Safety Commission.

The ideal way to swim is not only with someone, but in the vicinity of a trained

*See Pool and Beach Safety, page 3*

## Upcoming Events

**8/25 Group Safety Meeting  
Bldg 31 Cactus**

**9/6 Labor Day Holiday**

**Do you have events that we  
could help advertise in the  
Newsletter?**

**Send us a note at:**

**[aptsafety@lanl.gov](mailto:aptsafety@lanl.gov)**

## Around The Project...

- The LEDA Team has successfully accelerated a 50 mA continuous wave proton beam through the RFQ! Work continues towards the goal of 100 mA!
- Area A inserts 17A (materials samples), 17B (corrosion probes), 18A (steel clad tungsten rods) and 18C (Helium Loop) have been removed from Target A-6 at LANSCE and are on their way to the hot cells for analysis. All activities accomplished safely!

Please keep us up to date on what is going on with the people on our team. We would love to be able to share good news about births, new assignments, and awards! Also if people have moved or changed numbers, we can help get the word out! Please send any items for the newsletter to [aptsafety@lanl.gov](mailto:aptsafety@lanl.gov).

## Pool and Beach Safety

From page 2



rescuer. It's the U.S. Lifesaving Association's motto: Swim near a lifeguard. "Unless you're trained, there's not much you can do," says USLA National Secretary David Shotwell. And due to the unpredictable nature of the ocean, it's unwise for untrained individuals to attempt open water rescues. "Lifeguards know their territories and the conditions of the water," Shotwell says.

The National Safety Council and Jeff Ellis & Associates' Learn to Swim program teaches lifeguards that they must be able to scan a water area within 10 seconds and should be able to reach the person in distress within 20 seconds. This rule can also be used by non-lifeguards who are supervising children in the water.

### Know your way around a pool

Whether at the beach or in the backyard, there are rules to follow to make swimming as safe and injury-free as possible. One of the most obvious is to learn how to swim. In addition, use a

U.S. Coast Guard-approved personal flotation device, but never as a substitute for knowing how to swim.

The more accessible these objects are, the easier it will be for swimmers to rely on one if they begin to struggle. And remember, air-filled rafts and tubes are not considered actual safety devices or PFDs. Another water-related guideline -- prohibit alcohol consumption -- is crucial. The USLA calls alcohol a "major factor" in drowning. It reduces body temperature and impairs swimming ability. It also impairs judgement, inducing people to take risks they wouldn't otherwise take.

Lastly, families with pools should have an action plan ready in case of an emergency. Think through an emergency and practice what to do until help arrives.

### Know what you're leaping into

Diving into unfamiliar water is a major reason for aquatic-associated spinal injuries. The easiest tip to remember regarding water safety is never dive into any unknown water. Erik Knapp's most distinctive childhood memory of the swimming pool is when he dove into the shallow water of a hotel pool on a family vacation. "I was 9 years old, and I was really anxious to get in the water," Knapp says. "I dove right into two-feet of water and cracked my head open. I had to get six stitches."

Parents should encourage their children to "stop, watch and walk into the water," the USLA advises, because "perhaps more than any other trauma injury, [spinal injuries] can have severe lifelong consequences."

## What to Do If You See Someone Drowning

**Call 9-1-1 immediately. The National Spa and Pool Institute advises installing a telephone or using a cordless phone in any pool area.**

**If the victim is within throwing distance, throw a floatable object to them. This includes a life jacket, kick board or even an empty gallon jug.**

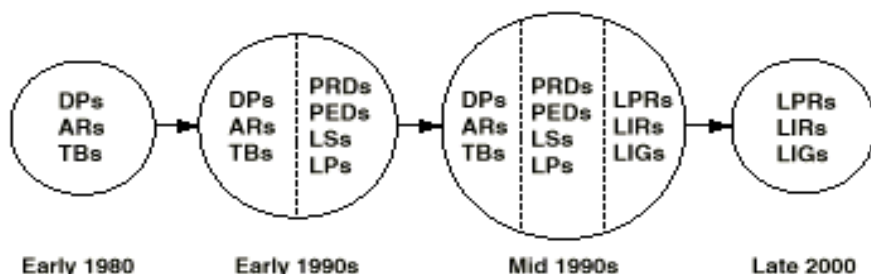
**If the victim is within reaching distance, assist them by extending something long, such as a rope, pole, ring buoy or a tree branch.**

**If you must enter the water to assist someone, take a flotation device large enough to carry two adults safely, says Jeff Ellis and Associates. Keep the device between you and the person in distress; even a child can put an adult at risk in deep water.**

## LIR Implementation!

From page 1

A "crosswalk" of old and new institutional documents is available on-line at the Laboratory's operations requirements/guidance Web site. Current versions of institutional documents are also available at this Web site: (<http://iosun.lanl.gov:1800/hdir/labreq.html>).



Progression of Laboratory Documents

## Measuring Our Safety Performance!!

It is helpful to be reminded of, and encouraged or challenged by how we are doing relative to our safety performance. As you can see by the information provided below, we can take pride in our recent performance. However, this does not mean that we should in any way let down our guard! On the contrary our goal is for continuous improvement. New hazards confront us daily and if we are to remain injury free we MUST constantly look for ways to work and play more safely!

### Management Walkarounds:

The Management Walk-Around database currently indicates that our organization has a 188.89% compliance rate for the quarter ending June 30, 1999. Management walk-arounds play a key role in maintaining safe work areas and workers.

### Standdown Action Items:

We continue to make progress on the closeout of our safety standdown action items. All "A" priority items have been completed. Only 5 of 23 "B" items, and 9 of 23 "C" items remain open.

### Injury/Illness Prevention:

All significant work related injuries and illnesses whether they require only medical treatment or involve restrictions on work activities or time away from work are tracked. The APT organization has had only one work related illness in the past 12 months. We have now gone 7 months with no work related injuries or illnesses. Our TRI and LWC rates of 3.51 (events per 200,000 man-hours worked) is the result of one event during the last 12 months in a relatively small workforce. These, however, are above the Lab's overall TRI rate of 2.9 and a LWC rate of 1.56.

#### Injury/Illness Prevention

Our present safety performance earns the "Green Light"!

	TRI	MTC	LWC-R	LWC-L
MTD	0	0	0	0
YTD	1	0	1	0
RATE	3.51	0	3.51	0
GOALS	0	0	0	0

TRI = Total Recordable Cases

MTC = Medical Treatment Cases

LWC-R = Lost Workday Cases - Restricted

LWC-L = Lost Workday Cases - Lost Time

Rates = Events per 200,000 man hours worked

## Tell It To Jim!

Want a way to express a safety concern or suggest a safety improvement but don't know quite how to go about it? Or maybe you have already spoken up but are not sure what has been done. Well, the following form can be used to get your concern or suggestion heard. Just fill in the information, cut out the form and mail it to Patty Montoya,

APT TPO lead secretary, at MS H816. We will be tracking items and actions monthly in the newsletter. It is APT's goal to effectively raise and respond to safety items within our organization; but remember, the Lab also has an effective Safety Concern Program available to all employees through the LANL Home Page.

## SAFETY ITEM

Description (Please be as detailed as possible):

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Facility: \_\_\_\_\_ Room/Area: \_\_\_\_\_ Date: \_\_\_\_\_

Suggestion for improvement:

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Name (Optional): \_\_\_\_\_ Phone/e-mail (Optional): \_\_\_\_\_